



Environmental impact of cardiac imaging tests for the diagnosis of coronary artery disease

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Abstract:

The use of cardiovascular imaging is growing inexorably and concerns have been expressed about its cost and radiation safety. In this study, the relative environmental impact of MRI, single photon emission tomography and cardiac ultrasound (echo) for the diagnosis of coronary artery disease were examined. The results emphasise that echo causes the least environmental impact at each stage of its life cycle. The effect of one echo on human health, ecosystem effects and resource use was of the order of 1-20% of those of the alternative methods. Although there are circumstances in which one imaging modality is preferred on clinical grounds, when everything else is equal, these results support the selection of echocardiography as the preferred test on environmental grounds.

Source: <http://dx.doi.org/10.1136/hrt.2011.227884>

Resource Description

Exposure :

weather or climate related pathway by which climate change affects health

Ecosystem Changes, Food/Water Quality, Solar Radiation, Other Exposure, Unspecified Exposure

Food/Water Quality: Biotoxin/Algal Bloom

Other Exposure: Ocean acidification

Geographic Feature:

resource focuses on specific type of geography

None or Unspecified

Geographic Location:

resource focuses on specific location

Global or Unspecified

Health Impact:

specification of health effect or disease related to climate change exposure

Cancer, Respiratory Effect

Climate Change and Human Health Literature Portal

Medical Community Engagement:

resource focus on how the medical community discusses or acts to address health impacts of climate change

A focus of content

Mitigation/Adaptation:

mitigation or adaptation strategy is a focus of resource

Mitigation

Resource Type:

format or standard characteristic of resource

Research Article, Research Article

Timescale:

time period studied

Time Scale Unspecified

Vulnerability/Impact Assessment:

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content